

# Product Fact Sheet

# SynQor®

## RAIL POWER

**RQ1BxxxHZ**  
EN 50155 Compliant  
Half-brick

## Rail Grade DC-DC Power Supply

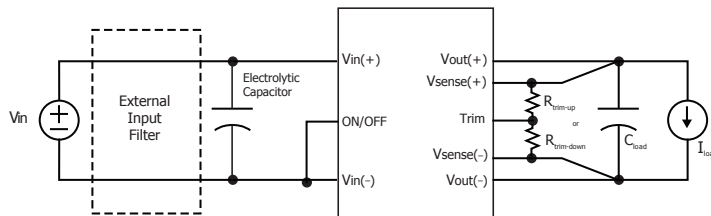
|                                  |                                 |                                                |                              |                                          |
|----------------------------------|---------------------------------|------------------------------------------------|------------------------------|------------------------------------------|
| <b>66-160 V</b><br>Input Voltage | <b>200 V</b><br>Transient Input | <b>5, 12, 15, 24, 48 Vdc</b><br>Output Voltage | <b>500 W</b><br>Output Power | <b>Up to 95%</b><br>Full Load Efficiency |
|----------------------------------|---------------------------------|------------------------------------------------|------------------------------|------------------------------------------|

Operating Temperature: -40°C to +100°C

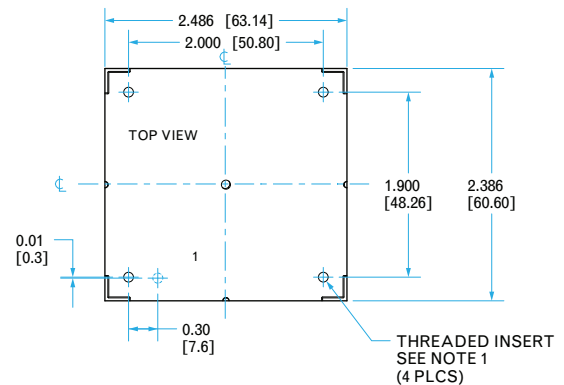


Designed and manufactured in the USA

### Typical Application



### Mechanical Diagram



### Key Technical Attributes

- Meets requirements of standard EN 50155
- Delivers full power with minimal derating
- Fixed frequency switching provides predictable EMI
- No minimum load requirement
- Input under-voltage lockout
- Output current limit and short circuit protection
- Active back bias protection
- Output over-voltage protection
- Thermal shutdown
- On/Off control referenced to input side
- Remote sense for the output voltage
- Output voltage trim range of -20%, +10%
- Full feature option available for use of multiple converters in parallel

### Safety Features

- Input-to-output isolation - 2000 Vrms
- UL 60950-1
- CAN/CSA-C22.2 No. 60950-1
- EN60950-1
- CE Marked
- EN45545-2 R24/R25 Compliant

### Part Number Scheme

Datasheet Link: [RailQor 1B Datasheet](#)

| Family | Input                           | Output                                                       | Package Size           | Thermal Design                                                                            | Output Current                                               | Enable Logic | Pin Style | Feature                        |
|--------|---------------------------------|--------------------------------------------------------------|------------------------|-------------------------------------------------------------------------------------------|--------------------------------------------------------------|--------------|-----------|--------------------------------|
| RQ     | 1B:<br>66-160 V,<br>200 V trans | 050: 5 V<br>120: 12 V<br>150: 15 V<br>240: 24 V<br>480: 48 V | HZ:<br>Half-brick Zeta | C: Encased<br>D: Encased with Non-Threaded Baseplate<br>V: Encased with Flanged Baseplate | 70: 70 A<br>42: 42 A<br>33: 33.6 A<br>21: 21 A<br>10: 10.5 A | N: Negative  | R: 0.180" | S: Standard<br>F: Full Feature |

Example: RQ1B050HZC70NRF-G